

(43) International Publication Date  
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number  
WO 2005/088463 A1(51) International Patent Classification<sup>7</sup>: G06F 13/00, 9/445, 13/10, 13/376

(74) Agent: RUNPING &amp; PARTNERS; Suite 509, Yingu Mansion, No. 9 Beisihuanxilu, Haidian District, Beijing 100080 (CN).

(21) International Application Number:

PCT/CN2004/000220

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 18 March 2004 (18.03.2004)

(25) Filing Language: English

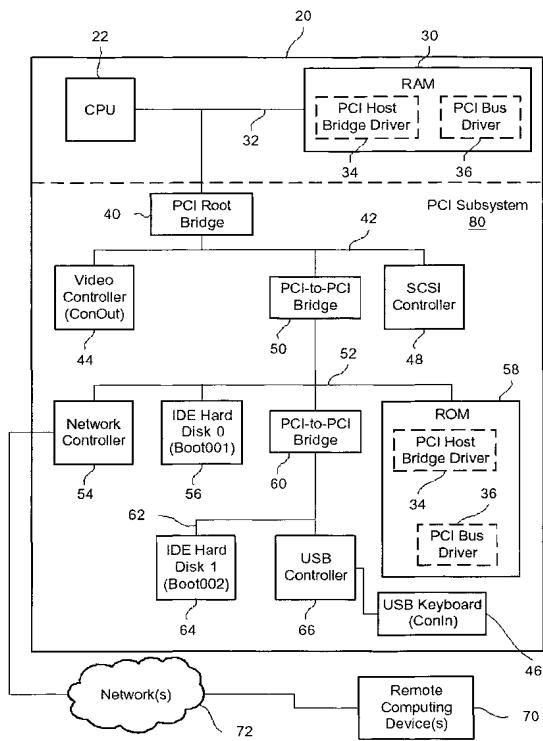
(26) Publication Language: English

(71) Applicant (for all designated States except US): INTEL CORPORATION [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: METHOD AND APPARATUS TO SUPPORT BOOTING DESPITE DEFICIENT RESOURCES



(57) **Abstract:** A method and related apparatuses support booting despite deficient system resources. In one embodiment, a processing system includes two or more devices in a peripheral connect interface (PCI) subsystem, as well as instructions encoded in a machine accessible medium. The instructions, when executed during a process of booting the processing system, may determine whether sufficient resources are available for the devices. The instructions may also retrieve boot information from an extended firmware interface (EFI) environment of the processing system, and may automatically identify a device as boot-critical, based on that boot information. The instructions may also identify a device to be rejected, and may automatically allocate resources for the boot-critical device but not for the rejected device, before the processing system boots the OS, if sufficient resources for the devices are not available. Other embodiments are described and claimed.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*